

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	: ICHIHARA et al.	<b>Certificate of Correction Branch</b>
Patent No.	: 7,378,656	Issued : May 27, 2008
Appl. No.	: 10/576,951	Filed : April 24, 2006
For	: INFRARED RADIATION ELEMENT AND GAS SENSOR USING IT	

**REQUEST FOR CERTIFICATE OF CORRECTION**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop **Certificate of Correction Branch**  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir :

Please find attached a proposed Certificate of Correction.

Please correct the following errors appearing in the printed patent which are apparently the fault of the U.S. Patent and Trademark Office, as per the attached Certificate of Correction. Since the errors are the fault of the USPTO, no fee is due.

At Column 10, Line 14 (Claim 13, Line 11), of the printed patent delete "An infrared radiation element A heat insulating layer having sufficiently smaller thermal conductivity than a semiconductor substrate, is formed on a surface in the thickness direction of the semiconductor substrate. A heating layer, which is in the form of a lamina (plane) and has larger thermal conductivity and larger electrical conductivity than the heat insulating layer, is formed on the heat insulating layer. A pair of pads 4 for energization are formed on the heating layer. The semiconductor substrate is made of a silicon substrate. The heat insulating layer and the heating

layer are formed by porous silicon layers having different porosities from each other, and the heating layer has smaller porosity than the heat insulating layer. By using the infrared radiation element as an infrared radiation source of a gas sensor, it becomes possible to extend a life of the infrared radiation source.” This appeared correctly on Page 16, Line 9 (Claim 13, Line 10) of the original claims filed on April 24, 2006.

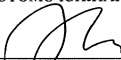
Therefore, it is respectfully requested that a Certificate of Correction issue in the above-identified patent as follows:

At Column 10, Line 14 (Claim 13, Line 11) of the printed patent, delete:

“An infrared radiation element A heat insulating layer having sufficiently smaller thermal conductivity than a semiconductor substrate, is formed on a surface in the thickness direction of the semiconductor substrate. A heating layer, which is in the form of a lamina (plane) and has larger thermal conductivity and larger electrical conductivity than the heat insulating layer, is formed on the heat insulating layer. A pair of pads 4 for energization are formed on the heating layer. The semiconductor substrate is made of a silicon substrate. The heat insulating layer and the heating layer are formed by porous silicon layers having different porosities from each other, and the heating layer has smaller porosity than the heat insulating layer. By using the infrared radiation element as an infrared radiation source of a gas sensor, it becomes possible to extend a life of the infrared radiation source.”

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed number.

Respectfully Submitted,  
TSUTOMU ICHIHARA et al.



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October 27, 2008  
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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

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PATENT NO. : 7,378,656

APPLICATION NO.: 10/576,951

ISSUE DATE: May 27, 2008

INVENTOR(S): ICHIHARA ET AL

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At Column 10, Line 14 (Claim 13, Line 11), of the printed patent delete

"An infrared radiation element A heat insulating layer having sufficiently smaller thermal conductivity than a semiconductor substrate, is formed on a surface in the thickness direction of the semiconductor substrate. A heating layer, which is in the form of a lamina (plane) and has larger thermal conductivity and larger electrical conductivity than the heat insulating layer, is formed on the heat insulating layer. A pair of pads 4 for energization are formed on the heating layer. The semiconductor substrate is made of a silicon substrate. The heat insulating layer and the heating layer are formed by porous silicon layers having different porosities from each other, and the heating layer has smaller porosity than the heat insulating layer. By using the infrared radiation element as an infrared radiation source of a gas sensor, it becomes possible to extend a life of the infrared radiation source"

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